Date: Fri, 13 May 94 04:30:19 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #127
To: Ham-Homebrew

Ham-Homebrew Digest Fri, 13 May 94 Volume 94 : Issue 127

Today's Topics:

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

Date: Thu, 12 May 1994 09:45:01 -0500
From: ihnp4.ucsd.edu!newshub.sdsu.edu!nic-nac.CSU.net!usc!howland.reston.ans.net!
EU.net!sunic!psinntp!psinntp!pbs.org!jernandez.pbs.org!user@network.ucsd.edu
Subject: UHF Power amps.
To: ham-homebrew@ucsd.edu

In article <jfk.1.000D22C9@cs.adel.edu.au>, jfk@cs.adel.edu.au (John
Kavanagh) wrote:

> Hi,
>
> Does anyone know of any good articles or books with practical circuits for the
> construction of power amps for 70cm.

Look in the Motorola RF device catalog. It has a multitude of good app notes in the back of the book.

--
John J. Ernandez

Communication Systems Engineer
Public Broadcasting Service

E-Mail jernandez@pbs.org   Member:PRR Technical & Historical Society
Phone: 703-739-5474   Southern Railway Historical Association
Amateur Radio: KA2YAP

Date: Wed, 11 May 1994 04:27:40 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!swrinde!emory!kd4nc!ke4zv!
gary@network.ucsd.edu
Subject: UHF Push/Pull design ?
To: ham-homebrew@ucsd.edu

In article <2qnl9m$4vo@cismsun.univ-lyon1.fr> elendir@enst.fr (Elendir) writes:
>
> I have been scared by the price of the latest VHF/UHF all mods rigs. So
>I decided to build my own. However, I'm looking for a UHF Push-Pull design.
>The very problem I have is in the design of the 180 degrees phase shifter.
>In VHF, I can use a small transformer with a ground tap in the middle, but
>this cannot be applied to UHF. I thought about a printed transformer or a
>transistor operating as an inverter. Neither those seem really satisfactory.
>Does someone have any clue ?

Sure just use a halfwave of transmission line as a very simple balun. It
works for antennas, and it'll work as a push-pull input network too.

Gary

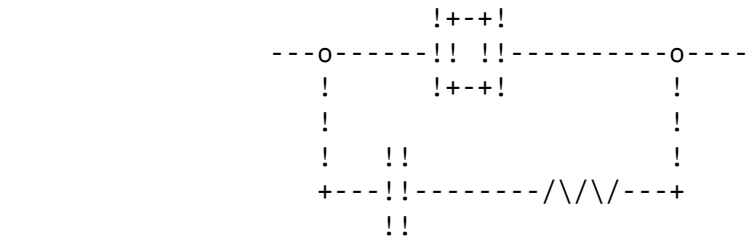
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Thu, 12 May 1994 15:34:26 GMT
From: pa.dec.com!nntpd2.cxo.dec.com!nntpd.lkg.dec.com!ryn.mro.dec.com!
est.enet.dec.com!randolph@decwrl.dec.com
Subject: Xtal temp. compensation?
To: ham-homebrew@ucsd.edu

I'm building a simple crystal freq reference... something I can zero beat
against WWV, and then use as a standard for setting my freq. counter.

Any thoughts on temperature compensation for this? I have an old Motorola HT220

(soon to be moved down to the 440 ham band) in which they use a cap and
thermistor, like this:



Sure beats a crystal oven, if I can figure out a way to implement it. What do I
need to think about in designing this little circuit?
-Tom R.   N1OOQ   randolph@est.enet.dec.com

Date: Thu, 12 May 1994 19:43:23 GMT
From: ihnp4.ucsd.edu!news.cerf.net!mvb.saic.com!MathWorks.Com!
europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-
state.edu!csn!col.hp.com!srgenprp!alanb@network.
Subject: Xtal temp. compensation?
To: ham-homebrew@ucsd.edu

Tom Randolph (randolph@est.enet.dec.com) wrote:

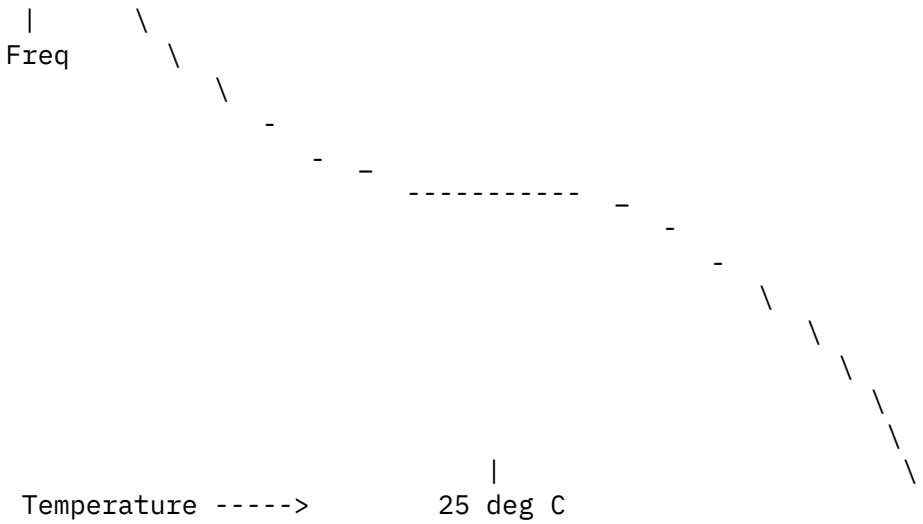
: I'm building a simple crystal freq reference... something I can zero beat
: against WWV, and then use as a standard for setting my freq. counter.

: Any thoughts on temperature compensation for this? ...

The problem is that quartz crystals do not have a linear frequency
versus temperature curve. Standard AT-cut crystals are generally
manufactured so that the inflection point in the F vs t curve is
flat at room temperature. So no compensation is needed so long
as you stay close to room temperature and the rest of your circuit
doesn't degrade crystal stability.

Crystals intended for use in temperature-controlled ovens are designed
to have a flat inflection point at the oven temperature.

Let's see if I can do an ASCII graph of an AT-cut crystal's frequency
versus temperature curve:



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End of Ham-Homebrew Digest V94 #127
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